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ABSTRACT

Repeated readings are a common, recommended practice for beginning readers. A study compared the gains made by high level and low level ability first grade readers in reading fluency. An initial reading of text at a second grade reading level was audiotaped and analyzed for rate and accuracy. This was followed by four readings, including a read-aloud, listening to an audiotape while reading, and a partner reading. Subjects were again audiotaped reading the text. High level ability readers made significantly higher gains in fluency than did the low level ability readers. Findings suggest that low level ability readers need direct instruction in word recognition or phonics in addition to repeated readings. (Contains 47 references and a table of data. Appendixes present 2 tables of data.) (Author/RS)

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ED 405 562

The Effect of Repeated Readings on the Fluency of High and Low Level Ability Readers in A First Grade Class

by

Patricia Marseglia

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Abstract

Repeated readings are a common, recommended practice for beginning readers. This study compares the gains made by high level and low level ability readers in reading fluency. An initial reading of text at a second grade reading level was audiotaped and analyzed for rate and accuracy. This was followed by four readings, including a read-aloud, listening to an audiotape while reading, and a partner reading. Subjects were again audiotaped reading the text. High level ability readers made significantly higher gains in fluency than did the low level ability readers. These results suggest that low level ability readers need direct instruction in word recognition or phonics in addition to repeated readings.

Acknowledgments

I wish to express my appreciation to Dr. Albert Mazurkiewicz, whose kind and patient instruction and assistance has made the completion of this study beneficial, informative and much less formidable than it might have been.

Dedication

I wish to express my gratitude to my husband and daughters, who have been unfailingly patient and considerate throughout the completion of this study, and to the children in my class, who made this research meaningful for me.

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If it is true that children learn to read by reading, as claimed by Smith (1973), then one of the primary concerns of the classroom teacher should be to instill in children a desire to read. It can be safely assumed that children, like adults, are more likely to repeat any behavior which they have performed successfully. Fluent reading is readily recognized as successful reading, even by beginning readers. Chomsky (1976) cites the case of a third grader who, upon reading fluently for classmates for the first time, felt triumphant and was viewed more positively by his classmates. The development of fluency is important to a child's self-image, and can affect a child's pursuit of independent reading. Stanovich (1986) found that a lack of fluency leads to decreased interaction with text, which in turn negatively affects vocabulary development and comprehension. Simmons et al. (1990) found that low performing students spent only six minutes engaged in oral or silent reading during their instructional reading time.

The ability to read fluently contributes to a reader's comprehension of the printed word. Mathes and Simmons (1992) describe fluency as a skill that enables a reader to comprehend the printed word. Samuels (1979) discusses the research on attention and states that attention can be focused in only one place at a time. The beginning reader, with his need to focus on decoding, is unable to focus on comprehension until he develops word recognition to the point of automaticity, which can be described as that point at which a behavior is automatic. He further claims that repeated readings result in increased word recognition, and recommends its use as a

supplement to a developmental reading program, especially for students with learning problems. LaBerge and Samuels' (1974) theory of automatic information processing in reading is often cited as the basis for the method of repeated readings.

Recent research supports the use of repeated readings as a method to develop fluency as defined in terms of word recognition accuracy and reading rate. (Rasinski, 1988; Dowhower, 1987; Chomsky, 1976; O'Shea, Sindelar & O'Shea, 1985). Roshette and Torgesen (1985) report that the development of fluency through rereading can transfer to new text when at least 60% of words are shared.

Both Allington (1983) and Anderson (1981) believed, at the time of their research, that the development of fluency, although important to reading success, was not fully addressed in the reading curriculum. Many commercially available literature-based basals seem, however, to have incorporated the recommendations of researchers who have found that fluency and comprehension increase as the number of repeated readings increased. O'Shea, Sindelar & O'Shea (1985) found four readings to be the optimal number for developing fluency on a given passage. Spring, Blunden & Gatheral (1981) concur, recommending between three and five practice readings to reach optimal fluency of a given passage. Rasinski (1988) recommends a variety of forms of repeated readings, including repeated read-alouds and listening to taped readings. He found these methods to be equally effective in improving the reading speed and word recognition of third-graders on a given passage, but research has not tested for varying

effectiveness of repeated readings for different reading ability levels.

Hypothesis

To provide additional evidence concerning this topic, a study was conducted to assess the effectiveness of repeated readings on both high level and low level ability readers. It was hypothesized that no significant difference in fluency increases would exist between high level and low level ability readers, when both groups read the same passage repeatedly.

Procedures

The North Plainfield Fall Reading Assessment was given to 28 first graders in October, 1996, including the Oral Reading and Sight Vocabulary subtests. Students with an oral reading score above first grade level were excluded from the study because they would not be expected to gain in fluency if they were already reading at or above a second grade reading level, which is the reading level of the trade book used in this study. Eight children were eliminated in this manner.

The mean score of the remaining students was determined to be 25.55. Students with a score at or above the mean were considered to be high level ability readers, and students with a score below the mean were considered to be low level ability readers. There were 11 high level and 9 low level ability readers.

Individually, students were asked to read the story Moondance. No background information was given other than the title of the story. These readings were audio taped. If a student could not identify a word, the teacher supplied the word after a five second delay. Miscues, in the form of omissions, substitutions, mispronunciations, or insertions, were not corrected.

After all students had read the story once for audio taping, the big book version of Moondance was shared with the whole class. Most students recognized the story from their attempts to read it. The story was discussed briefly before the story was read once in its entirety as the teacher tracked the print with her finger and the children followed along. Further discussion followed this reading. The story was read a second time, and children were invited to join in wherever they could.

The next day, groups of six children listened to a commercially-prepared audio tape of the story on headphones as they followed along in individual texts. This represented the third reading. No teacher assistance or involvement occurred.

On the third day, students were paired with a peer according to their sight vocabulary scores. The lowest scoring student was paired with the highest scoring student, and subsequent students were paired in the same way. These pairs were asked to read the story together, sharing one book between them in order to prevent students from reading at their own pace and ignoring their partner. This procedure was not new to the students.

On the fourth day, students were once again asked to read the story Moondance and were audio taped as they did. The same procedures were followed as during the first taping.

The audio tapes of the first and final readings were analyzed for reading rate by determining the number of words read per minute, and for word recognition, by determining the number of miscues. A score for correct words per minute was used to assess changes in fluency. For this study, only students' readings of pages 1 - 10 were analyzed.

Results

Both high level and low level ability readers improved in reading rate. All of the high level ability readers and all but one of the low level ability readers improved in fluency, as determined by correct words read per minute. In a two-tailed test of probability, the gains of the high level readers (the experimental sample) were significantly higher than those of the low level readers (the control sample). As can be seen in Table I, there was a difference of

Table I
Mean Gains, Standard Deviations and t of the
Samples' Post-Experiment Scores

Sample	M	SD	t
Experimental	23.19	17.91	2.73
Control	6.39	4.58	

almost 17 points (sig <.01) between the mean gains of the samples' achievement at the conclusion of the study and this difference was statistically significant.

Conclusions

The practice of repeated readings, in a variety of forms, has merit because it can increase the fluency of first grade readers. It would appear that all children will improve word recognition, and, in turn, fluency after multiple exposures to familiar text, even in the absence of direct instruction. Gains in fluency, however, seem to be a function of ability. High level ability readers benefited more from this method than low level ability readers. These findings seem to indicate that some children need more than repeated exposure to text, and may not gain as much as their peers from partner readings, listening to taped readings, or other practices that do not involve direct teacher instruction. Indeed, the gap between high and low level ability readers may widen if the practice of repeated readings continues over time without direct instruction in such elements of the reading program as sight word recognition or phonics. Teachers of beginning readers may need to adapt their classroom activities to provide those youngsters who have more difficulty with sight word recognition with instruction beyond repeated readings. Since four readings have been found to be optimal for fluency gains (O'Shea, Sindelar, & O'Shea, 1985), allowing low level ability readers to read the same text more than four times might be an inefficient methd of promoting fluency in these children.

Repeated Readings: Related Literature

The method of repeated readings is based on Samuels' theory of automatic information processing in reading (LaBerge and Samuels 1974). According to automaticity theory, beginning readers can focus their attention on only one aspect of reading at a time. Because they lack the ability to recognize words automatically, they must focus their attention on decoding. In doing so, attention becomes unavailable for comprehension of the text. Meaning can be accessed only after several readings, during which the reader begins to recognize words automatically. Rereading of text builds fluency and comprehension because it is during those subsequent exposures that cognitive functioning is no longer needed for word recognition.

Perfetti's (1977) bottle-neck theory describes a relationship between fluency failure and reading comprehension, and seems to support Samuels' theory of automaticity. Slower coding obstructs a reader's ability to hold large units of text such as clauses and sentences in memory, making it difficult to gain meaning.

Originally intended as a supplement to a developmental reading program, the method of repeated readings is particularly suitable for students with special learning problems, according to Samuels (1979). He compares its use to the training of musicians and athletes, citing both these and reading as activities in which high levels of performance are required. These high levels of performance are reached only after mastery of intermediate skills is attained through practice.

Samuels' original method involved rereading a short, meaningful passage several times

until a satisfactory level of fluency is reached. Speed was emphasized over accuracy to prevent the student from being fearful of making mistakes, and thus slowing his reading rate. A criterion rate of 85 words per minute was set. The student practiced the passage alone, either with or without audio tape support. Tapes of a students' oral reading, or graphs indicating progress, could be presented to the student as a form of motivation.

Chomsky (1976) also began using repeated readings at about the same time. She described nonfluent readers as experiencing pain, humiliation and frustration when attempting to read orally in the presence of others. Recognizing that young children who read early often memorize text, she had third grade nonfluent readers, who had previously had phonics instruction, remedial reading instruction and who had developed a fair sight vocabulary, listen to audio tapes of whole books. They listened to these tapes repeatedly and taped themselves reading the text. It took approximately twenty listenings to achieve fluency, although she does not describe her criterion for defining fluency. The third graders participating in her study enjoyed the use of the tapes, improved their oral reading, and expressed pleasure in their accomplishments. Their parents and teachers also reported increased independent reading and writing.

Bell (1990) noted that redundancy in some form is a necessary component in any reading program. It is effective because it restricts the amount of material presented, reduces the possible number of response alternatives, and increases the repetition of words or phrases within and

between stories. Repeated readings offer the greatest amount of redundancy. Smith (1971) seems to be advocating rereading when he argues that children learn to read by reading, and that a teacher's prime concern must be to do as much reading as is necessary for children to make progress on their own. Clay (1991) suggests that rereading familiar text is a way for children to smoothly integrate those behaviors necessary for efficient reading.

Until recently, the issue of developing fluency, although important to reading success, was not fully addressed in many basal reading programs (Allington, 1983; Anderson, 1981). It was described as a forgotten element and as a missing ingredient. More recent editions of basal readers seem to have taken into consideration the recommendations of many of the studies described herein.

Most research on repeated readings has focused on its effect on fluency, as measured by accuracy of word recognition and speed. Many researchers operationally define fluency in terms of word recognition and reading speed (e.g. Samuels, 1979; Rasinski, 1990; Rokicki, 1990; Bowers, 1993). Others include measures of self-correction of errors (Turpie and Paratore, 1994) or the number of speech pauses (Herman, 1985). Mathes and Simmons (1992) describe fluency as an enabling skill that allows readers to comprehend the printed word more successfully. Schreiber (1980) describes it as the ability to compensate for the absence of prosodic cues in text. He further argues that repeated readings allow a reader to put words into meaningfully related phrases, despite the absence of punctuation.

Fluency, as measured by word recognition and reading rate, has been found to increase significantly as a result of repeated readings. Word recognition is an essential element of fluent reading, and according to automaticity theory, a prerequisite to comprehension (Simons, 1992). Word recognition must be automatic before a reader can turn his attention to the meaning of the words, rather than on decoding the words. Repeated readings can contribute to word recognition, (Dixon-Krauss, 1995; Rokicki, 1990; Turpie and Paratore, 1994; Sutton, 1991) thus, indirectly contributing to comprehension (Herman, 1985). Nonfluent readers frequently read limited amounts of text. (Stanovich, 1986). This practice, in turn, limits vocabulary development and has a detrimental effect on the reader's comprehension.

The value of repeated readings, or more accurately, repeated listenings, is evident even in preschoolers. Martinez and Roser (1985) found that children's range of verbal responses increased after three rereadings of a story. Specifically, they found that the amount of verbal interaction increased, and took place in greater depth. The children's talk change in both form and focus; there were more comments than questions, and more attention to story details after three rereadings. The effect on comprehension seems to be unrelated to word recognition in this case, because these children were not reading, but listening to the story.

Third graders cued to read as quickly and accurately as possible read faster, but comprehended less than those students cued to remember as much as they could about a story (O'Shea, Sindelar & O'Shea, 1985). However, under either cuing condition, students retold a

significantly greater proportion of the story between one and three or seven readings. Comprehension scores, and reading rates, which included a measure of word recognition, increased for both cuing conditions. With or without attentional cues, fluency and comprehension were enhanced with rereadings.

Fowler (1993) seems to disagree when she recommends that, in addition to allowing opportunities for repeated readings, teachers encourage students to speed up at unknown words. so that demands on short-term memory will be reduced. The rate at which information enters both short and long-term memory will affect comprehension.

Intermediate grade students who read five passages to a criterion rate of 85 words per minute increased their reading rate significantly between and within stories. These results imply that repeated practice has an impact on a student's ability to read a given story and that these effects may transfer to other stories (Herman; 1985). These subjects also increased their comprehension of the passages read significantly, as determined by the quality of the miscues.

Rokicki (1990) found that five intermediate grade, learning disabled students improved in comprehension, fluency and word recognition over a period of ten weeks after hearing repeated taped readings. Story maps were also used, however, and improvement in these areas could have been related to those activities. Her study does not control for this variable, and was limited to five students.

In another limited study with four white, middle class first graders, Turpie and Paratore

(1994) found that six rereadings of a given selection, four of which were paired readings with a peer, resulted in substantial increases in accuracy and self-correcting behaviors. Although no student met the target rate of 85 words per minute, fluency rates tripled for each student. Perhaps the finding most applicable to a classroom is that a passage which had been initially read at a frustration level was later read at an instructional level. First graders given extra support can experience success in a heterogeneously grouped reading class (Hall and Cunningham; 1992). While heterogeneous grouping is believed to be the preferred practice, teachers are faced with the task of meeting the needs of children with a wider variety of ability levels. Repeated readings may provide a way to support lower ability readers and allow them to participate more fully in reading activities.

The amount of scaffolding, or support, that a given child needs is inversely related to the difficulty of the text (Stahl, 1994). With strong support, a child can benefit from instruction with reading material at a greater relative level of difficulty. Teacher modeling can put the text into the child's zone of proximal development. This zone is the child's potential for development beyond his currently level of independent functioning (Vygotsky, 1978). Reading material that is too difficulty may not allow a child to benefit from instruction because too much of his attention must be focused on a single element of reading, specifically, decoding. Growth in word recognition, as a result of repeated readings, may allow the beginning reader to focus his attention to instruction in other areas, such as phonics or metacognition.

Simmons et al (1990) found that learning disabled and lower performing students spend only six minutes during reading instruction involved in actual oral or silent reading. They suggest that, although this is clearly insufficient, repetitive practice in itself will not be an adequate supplement. Homan et al. (1993) however, raise the question of whether or not the value of repeated readings does not, indeed, lie simply in its focus on increased amounts of connected reading. Teachers need to couple repeated readings with immediate feedback in order to improve reading fluency, and ultimately, comprehension. Carbo's Continuum of Modeling Reading Methods (1996) includes repeated readings as a developmentally appropriate method for children who have already heard a story read by the teacher and have read along with her, or have listened to a recording of a book while following along in the text. The adult model, either oral or taped, provides the feedback necessary to a beginning reader's progress. Carbo defines repeated readings somewhat differently than other researchers, and suggests that it should involve echo reading, with the student echoing the teacher in a line-by-line reading of a passage. Many of the other methods in her continuum , including choral and paired readings, would be defined as repeated readings by other researchers (Rasinski, 1988). Her findings are consistent with those of Dixon-Krauss (1995) who concluded that beginning readers need a higher level of direct support, through adult modeling, and echo or choral reading, to develop fluency.

Children who are learning a second language also benefit from repeated readings. Audio taped books can support their literacy instruction, and provide a link between home and school,

if the tapes are brought home. This method enables these students, as well, to read increasingly difficult texts more fluently. The inclusion of audio tapes was found to be more effective than repeated readings without a fluent model. (Blum, 1995).

Children seem to enjoy repeated readings. Researchers report that the subjects of their studies have asked to continue using the audio tapes of stories (Chomsky, 1976; Bohlen, 1988). Teachers may allot more time to repeated readings, sometimes at the expense of instruction in other reading skills, such as word analysis and comprehension, because of their students' enthusiasm for the method (Otto, 1985).

A child's attitude toward reading is a contributing factor to his success in reading. The ability to perform a task with ease, or a sense of accomplishment of that task, will affect the reader's desire to continue, or repeat the task independently. Although the effect of repeated readings on students' attitudes toward reading is one of the least researched areas, studies have shown that repeated readings can significantly improve a child's attitude toward reading. Positive gains have been reported across grade and ability levels (Stahl, 1994; Rokicki, 1990). Parents have also reported anecdotally that their children seem to be more interested in independent reading and writing at home after having become able to read fluently in school (Chomsky, 1976). Sutton (1991) found significant increases in the number of books read as a result of increased oral reading fluency.

In a study with second and third grade students, however, Bell (1990) found no evidence

of a difference in mean attitude towards reading, in spite of significant gains in reading speed for three passages, and significant gains in accuracy for one of three passages. Her study included the use of visual feedback of progress through the use of graphs, the withholding of visual feedback, and a control group who did not experience repeated readings. Verbal feedback was withheld from all groups, but her study does not address the importance of this aspect. Graphs were not discussed with the subjects, but merely shown to them.

The motivational effect of visual feedback seems to be related to the method used to exhibit progress. When students' improvement in reading rate of a given passage was plotted on a graph, students exhibited enjoyment of their progress in the form of smiles, laughter and clapping when presented with the visual evidence. Conversely, when attempting to reach a fixed-rate criterion for reading rate, they displayed overt expressions of discouragement at not having reached that rate immediately. These disappeared upon attainment of the set rate (Weinstein and Cooke, 1992).

Another reason that repeated readings may positively affect fluency is that they allow the readers the opportunity to become familiar with the syntactic and semantic features of the passage, contributing directly to fluency and indirectly to comprehension. Schreiber (1980) attributes reading dysfluency, not to word recognition problems, but to the inability to put even known words into meaningfully related phrases. He points out that punctuation does not give a complete set of clues to the corresponding phrasing of spoken language, and that repeated

readings allow the reader to discover that morphemic and syntactic clues must be used to read fluently.

The ability to group words into meaningful phrases is clearly lacking in the halting, expressionless reading style of many readers, whether they are beginners or not (Chomsky, 1976). Prosodic reading, or reading in meaningful phrases, can be considered evidence of proficient reading. Cromer (1970) found that difference readers (those who do not organize text into meaningful phrases in spite of word recognition and mental ability to do so) improve in comprehension only when they are forced to read using proper phrasing. Clay and Imlach (1971) assert that beginning readers frequently read at a rate that destroys contextual cues that aid in word recognition and comprehension.

Adult modeling of fluency seems to be especially important in the case of difference readers. Children need to hear proper phrasing in order to make the connection between the spoken and written word. In her observational notes on fluency, Dixon-Krauss (1995) describes the effect of peer feedback on first and second graders' use of expression and punctuation. Little improvement in fluency was evident, even when students were aware that they were not reading fluently. No direct comparison of the difference between the presence or absence of adult modeling was made.

Reutzel and Hollingworth's (1993) comparison of the Oral Recitation Lesson does make such a comparison. In a study with second graders, they found the Oral Recitation Lesson to be

superior to repeated readings in its effects on comprehension measures. It is important to note, however, that they defined repeated readings in the strictest sense; it involved literally only reading a passage repeatedly. No adult modeling of fluency was provided. The Oral Recitation Lesson, on the other hand, included three phases: teacher presentation and oral modeling, student rehearsal of a passage, and the performance or recitation of the passage. These phases included comprehension-enhancing practices such as story prediction, fluency modeling, and repeated readings.

Researchers have found that repeated readings are equal to or better than other study skills strategies such as note taking, outline, or summarization for recall of factual information. High ability readers also focus on higher levels of information during a second reading of a passage (Dowhower, 1989). This method has also been found to help students remember more important structural information and important terms. Problem solving also improved with repetition. (Mayer, 1983; Bromage and Mayer, 1986).

Much of the research on repeated readings has involved learning disabled or at-risk children (Kann, 1983; Weinstein and Cooke, 1992; Rokicki, 1990). Mathes and Simmons (1992) assert that children with lower reading ability have been shown to evidence the greatest gains using repeated reading.

Carbo (1978) discusses the appropriateness of this method for the auditorily perceptually handicapped child. She chose to use audio taped books to enable students to develop a basic

sight vocabulary from which phonics rules could be learned and to which they could be applied. Repeated readings met her criteria of a method that would present words contextually and be highly structured with instant feedback. She also wanted a method that would be multisensory, fail-safe and of high interest.

Carver and Hoffman (1981) reported on two separate studies which sought to determine whether or not the findings on the effectiveness of repeated readings on fluency could be replicated on a computer controlled feedback system. Besides finding that computer-based systems could be used for practice reading, they offer an explanation for the limited gains in reading ability that high school students experienced through repeated readings. Those students reading on a fourth to sixth grade level, who might still have difficulty with decoding, experience gains in reading fluency. Those reading on a fifth to eighth grade level did not experience gains in fluency. Carver and Hoffman believe that these children did not make similar gains because they are reading to learn, rather than learning to read, and that they must comprehend material that would be difficult for them even if they heard it read to them orally. They predict gains in reading ability only for those students who have a listening ability level higher than their reading ability level.

Those teachers considering the usage of repeated readings in a classroom need to determine the manner in which they will proceed. Research offers practical advice on the optimal number of rereadings. Four readings may be the optimal number of exposures to a given

passage, because 83% of the fluency increase between one and seven readings is achieved by that point (O'Shea, Sindelar and O'Shea, 1985). These findings support those of Spring, Blunden, and Gatheral (1981) who found that three to five readings were optimal for fluency increases.

Samuels' (1979) recommended rereading a passage until a set criterion of 85 words per minute was reached. He cites the results of a student who required seven rereadings of a first passage to reach the criterion rate, followed by seven, six, and four rereadings respectively on the next three passages. Claiming that this students' progress was typical, he suggests that transfer of training and a general improvement in reading fluency is indicated by the decreasing number of rereadings necessary to reach the criterion rate.

Chomsky (1978) does not offer specific recommendations, but tells that four of the five students she worked with needed twenty rereadings to read a given text fluently. Increases in independent reading and writing behavior were interpreted as indications that these children were better able to undertake reading new material.

Weinstein and Cooke (1992) suggest that rereading until three successive improvements in fluency are made is preferable, for the sake of efficiency, to rereading until a fixed rate of 85 words per minute is met. The four, learning disabled subjects in their study required between eleven and twenty-one rereadings to reach the fixed rate criterion, and note those students' discouragement in attempting to do this. The same students needed approximately eight rereadings to achieve three successive improvements in corrects words per minute read.

Rereading for improvement also increased generalization of fluency to new passages.

The issue of transfer of training and a general improvement in reading fluency should be of prime concern to the classroom teacher. The ultimate goal of any reading method should be to improve a child's ability to read. If repeated readings offered only a way to improve word recognition accuracy and reading rate on a given passage, its worth would be limited. Transfer effects have been reported, however, (Schreiber, 1980; Samuels, 1979; Carver and Hoffman, 1981). Herman (1985) attributes this effect not to transfer of the ability to read prosodically, but to the automaticity of word recognition.

Bower (1993) found no transfer of gains from one passage to another, in a two year study which followed thirty-seven children from grade two through grade four. Regardless of the child's reading ability, the initial reading of five unrelated passages was quite similar in terms of accuracy and speed. This result was expected, in light of the work of Roshotte and Torgesen (1985) who found that the gain in reading fluency had little carry-over to new passages, unless the new passages shared 60% of the same words. Without shared words, two selections do not offer a reader the redundancy he needs to read fluently.

Implementation of this practice has evolved since Samuels' original format, and can now take several forms. Rasinski (1988) recommend that teachers set up repeated readings so that they are done within meaningful and purposeful contexts. Readers' theater, taped readings, cross-age tutoring, song lyrics, poetry, and games are options beyond the shared book experience

that provide students with activities that are a natural and integral part of real literacy activities.

Carbo (1996) adds choral and paired readings to the range of activities that allow children to experience repeated interactions with a given passage. She also includes the neurological impress method, in which a teacher sits behind the child and reads into the child's ear. Both hold the book and read in unison. The child tracks the print with his finger.

Studies involving the usage of this method are few and the results of those are contradictory. New material is read at each session. Repeated readings have been found to have more value for learning disabled children, especially in strengthening the reader's syntactic capabilities through modeling (Kann, 1983).

In summary, the research on repeated readings has shown that repeated readings are an effective method for improving the ability to read faster, with more accuracy, and with proper phrasing. These findings have been found to be transferable to new passages. It has also been found to indirectly improve comprehension and attitude toward reading, and to change the difficulty level of a given passage for an individual reader.

Data can be found to support the optimal number of readings per passage.

It is theorized that repeated readings are effective because a reader's attention no longer needs to focus on decoding, and can turn to speed and meaning. Exposure to the syntactic and semantic clues in a passage may also contribute to the rationale for this method. Adult modeling seems to be an integral factor in the efficacy of repeated readings.

The method has evolved from Samuels' original proposals to include common classroom practices, including shared book readings, partner reading, repeated listenings to audio taped adult models of fluency, and choral readings. Computers have also been found to be effectual tools for practice readings.

The method has been tested, for the most part, with at-risk, nonfluent, or learning disabled children, with the noted exception of Sindelar (1990) who found that repeated readings had the same significant effects on reading fluency and recall for both learning disabled and non-learning disabled children, when matched for ability level. Few studies have been done with older students or adults.

There is little research involving the use of this method with the general population of school age children, who do not have difficulty with word recognition, fluency, or comprehension. The need for repeated readings may not exist for these children.

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Appendices

Appendix A

North Plainfield Fall Reading Assessment Scores

Subject	Oral Reading	Sight Vocabulary
1	3	48
2	3	45
3	3	42
4	3	40
5	3	33
6	3	32
7	3	31
8	3	29
9	2	29
10	3	27
11	3	27
12	3	22
13	2	20
14	3	20
15	2	18
16	2	15
17	1	13
18	2	10
19	1	5
20	1	5

Note: For oral reading, the following scores correspond with these approximate reading levels:

3 = preprimer 3
2 = preprimer 2
1 = preprimer 1

Appendix B

Pre and Post-Test Scores in Correct Words Per Minute

Subject	Pretest	Post-test	Gains
1	30.88	44.12	13.24
2	20.4	29.73	9.33
3	60.92	67.00	6.08
4	23.5	81.6	58.1
5	36.58	90.22	53.64
6	20.27	35.24	14.97
7	22.06	51.49	29.43
8	33.54	47.81	14.27
9	17.09	37.00	19.91
10	15.86	44.59	28.73
11	18.97	26.35	7.38
12	16.10	27.63	11.53
13	14.31	26.35	12.04
14	29.84	34.69	4.85
15	11.00	20.55	9.55
16	17.34	26.14	8.80
17	10.71	8.96	-1.75
18	8.15	14.22	6.07
19	11.74	13.46	1.72
20	8.35	13.04	4.69